
7. Mountain

Program Name: Mountain.java

Input File: mountain.dat

You love climbing mountains, and in fact, you think of yourself to be quite exceptional at the sport. Your friend decides to test that theory and presents you with a series of challenges. For each challenge, she gives you the layout of a “mountain” of blocks as an $n \times n$ grid of positive integers, where each integer in the grid represents the height of that location in blocks. She tells you your starting position will always be in the top left corner. Given this information, she asks if you think you can reach the top. Rather than rush off to try and prove you really are the greatest mountain climber in town, you decide to approach things logically.

In the grid layout, each block unit is the equivalent of 5 meters. You figure that you can only climb up one single block at a time, but you can jump down up to 2 blocks at a time. Additionally, you can only go up or down adjacent blocks (left, right, up, down).

Armed with this knowledge, you write a program to determine if it is possible for you to reach the highest block.

Input

The first line of input consists of a single integer, t , indicating the number of challenges that follow.

For each challenge, there will be a single integer, n . The following n lines have n positive integers each, representing the layout of the “mountain.”

Output

For each test case, print YES if it’s possible to reach the highest point, and NO if it’s not possible. There will always be a single highest point.

Constraints

1 $\leq t \leq 10$
1 $\leq n \leq 100$

Example Input File

```
3
3
1 1 1
1 3 1
1 2 1
3
1 1 1
1 3 1
1 1 2
5
3 1 3 1 1
1 1 3 7 2
2 3 3 7 3
4 4 7 7 4
9 8 7 6 5
```

Example Output to Screen

```
YES
NO
YES
```